

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (Previously Presented) A cryptographic method during which an integer division of the type $q = a \text{ div } b$ and $r = a \text{ mod } b$ is performed in a processor of an electronic device, where q is a quotient, a is a number containing m bits, b is a number containing n bits, with n less than or equal to m and b_{n-1} is non-zero, b_{n-1} being the most significant bit of b , comprising the following steps:

(i) performing a partial division of a word A , comprising n bits of the number a , by the number b to obtain a bit of the quotient q , wherein at least one of the numbers a and b comprises secret data;

(ii) repeating step (i) for $m-n+1$ iterations with the same number and type of operations being performed at each iteration, regardless of the value of the quotient bit obtained, to obtain the quotient q ; and

(iii) generating encrypted or decrypted data in accordance with said quotient.

2. (Previously Presented) A method according to Claim 1, wherein, at each iteration, an addition of the number b to the word A and a subtraction of the number b from the word A are performed.

3. (Canceled)

4. (Previously Presented) A method according to Claim 1 wherein, at each iteration, either the number b or a number \bar{b} complementary to the number b is added to the word A .

5. (Previously Presented) A method according to Claim 4, further including the step, at each iteration, of updating a first variable (σ') indicating whether, during the following iteration, the number b or the number \bar{b} is to be added with the word A according to the quotient bit produced.

6. (Canceled)

7. (Previously Presented) A method according to Claim 1, further including the steps, at each iteration, of performing an operation of complement to 2^n of an updated data item (b or \bar{b}) or of a notional data item (c or \bar{c}), and adding the updated data item with the word A .

8. (Previously Presented) A method according to Claim 7, further including the step, at each iteration, of updating a second variable (δ), indicating whether, during the following iteration, the operation of complement to 2^n is to be performed on the updated data item or on the notional data item.

9. (Previously Presented) A method according to claim 7, further including the step, at each iteration, of updating a third variable (β) indicating whether the updated data item is equal to the data item b or to its complement to 2^n .

10. - 11. (Canceled)

12. (Previously Presented) An electronic component comprising calculation means programmed to implement a method according to claim 1, said calculation means comprising a central unit associated with a memory comprising several registers for storing the data a and b.

13. (Previously Presented) A chip card comprising an electronic component according to Claim 12.